

L1 ANSWER 3 OF 3 PCTFULL COPYRIGHT 2002 Univentio  
AN 1997012328  
TIEN OPTIMUM ACCESS TO ELECTRONIC DOCUMENTS  
ABEN A method and apparatus for providing an optimized page-based electronic document file (figure 2a) and downloading the optimized file. An optimized document file is created from a non-optimized electronic document (74). Page contents are contiguously written in the optimized file and page offset information (68, fig. 8a) used to locate individual pages and objects of the document. When downloading the optimized file from a host, the page offset information is read early and is used to download a specific page requested by the user without downloading other pages in the document. A viewer may download (226) a first portion of the requested page, while all remaining portions of the requested page are located by a finder process using the page offset table (68, fig. 8a). Alternatively, all objects for a full page may be requested at once. The requested page can thus be downloaded with only one connection to the host. Optionally, shared objects can be downloaded and interleaved between portions of the page contents (284) that reference the shared objects. They can also be read in one transaction identifying byte ranges in the document. Subsequently, the requested